



# **Global Supply Chain Food Safety and Risk Management Strategy**

**World Spice Congress  
New Delhi, India  
February 3-5, 2010**

**Roger Lawrence  
Vice President, Quality Assurance  
McCormick & Company, Inc.**



# Agenda

- ***Background***
- ***Global Food Safety Risk Management Strategies***
  - Prevention***
  - Intervention***
- ***Examples of Proactive Programs***
- ***Awareness and Early Warning Initiatives***
- ***Legislative and Regulatory Engagement***
- ***Efforts to “Raise the Bar” for the Global Spice Industry***





# Company Profile

- ***McCormick & Company, Inc. is the world leader in the manufacture, marketing and distribution of spices, seasonings, flavorings and other food products to all segments of the food industry - retail, food service and food processors.***
- ***Founded in 1889.***
- ***Headquartered in Maryland.***
- ***Sell products in over 100 countries.***
- ***Sales in excess of \$3.2 billion.***
- ***Approximately 7,500 employees.***
- ***Manufacture products in over 20 countries, operating over 47 plants and laboratories.***
- ***Brands with established reputation for consistent, high-quality, safe, and wholesome food products***



# Our Global Product Portfolio

- *Spices and Herbs*
- *Seasoning Mixes*
- *Condiments (mustard, mayonnaise)*
- *Pour-over sauces*
- *Marinades, Glazes and Rubs*
- *Salad Dressings*
- *Gravy Mixes*
- *Cooking Sauces*
- *Jams*
- *Teas*
- *Batters and Breading*
- *Dessert Mixes and Baking Aids*

# Global Brands





## PROTECTION OF THE McCORMICK BRAND IS OUR FIRST PRIORITY

- ***Consumers trust the McCormick Brand and food safety and quality are critical to that trust.***
- ***Business Survival – Our brands are most important assets.***
- ***Industry Responsibility – We are committed to food safety across the food chain more than ever.***
- ***Safe food starts with safe ingredients.***



# The Globalization of the Food Supply

## EXAMPLE: United States

- *A vast increase in the amount of food imported from overseas – 13% of the average family's food is now imported from over 180 countries around the globe.*
- *60% of fruits and vegetables and 80% of seafood are now imported.*
- *There are more than 130,000 foreign facilities registered with the FDA to import to the US.*
- *Food imports will expand to meet consumer need for more variety, year around availability and lower cost.*
- *Primary challenge of cross-border food shipments has been and continues to be management of the food safety, regulatory and quality risks.*



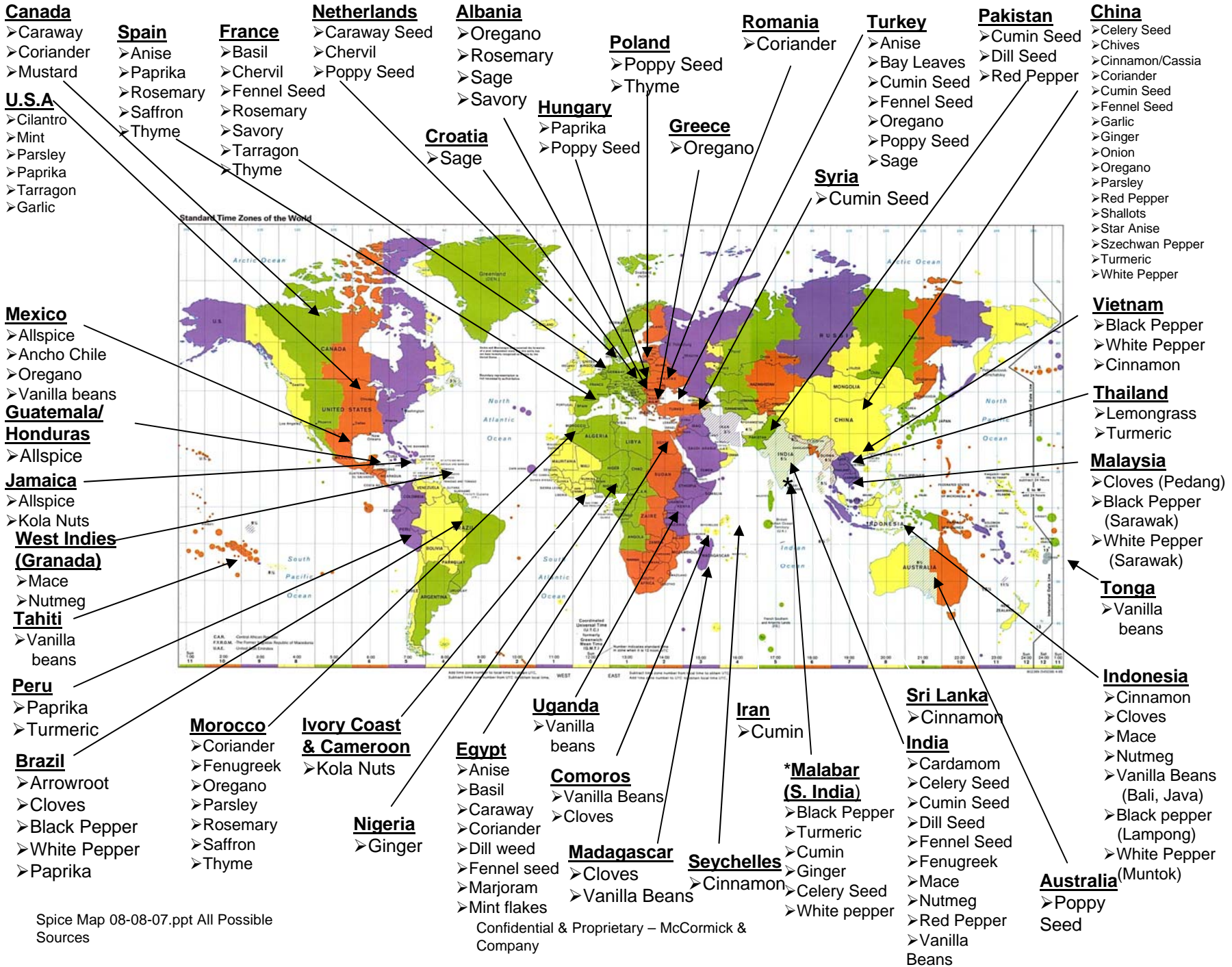
# Spice and Herb Sources



***THE SPICE SOURCING UNIVERSE – The following slide illustrates all major sources of spices throughout the world.***

***McCormick's history of successfully sourcing from this entire universe over the life of the company has enabled us to achieve the optimum quality from year to year given localized variations due to weather and economic / political instabilities.***

***Successfully sourcing from multiple locations facilitates securing the quantity and quality of material at the optimum price.***



Spice Map 08-08-07.ppt All Possible Sources

Confidential & Proprietary – McCormick & Company



# Our History

***McCormick has been in the business of sourcing raw materials globally since our founding in 1889. Few companies have our know-how and experience in sourcing pure, wholesome and safe food products from so many countries around the world.***

***McCormick has a long history of sourcing from China, India, Indonesia and other emerging areas that are characteristically more challenging for Good Agricultural Practices, Good Manufacturing Practices and adulteration-free product.***



# Food Safety & Risk Management Strategy







## Major Food Safety and Regulatory Hazards Associated with Spices

- ***Microbiological Contamination***
- ***Foreign Material***
- ***Economic adulteration***



## Risk Management Core Elements

- ***PREVENTION – Build quality and food safety in from the start.***
- ***INTERVENTION – Verify preventions with focused inspection and risk-based surveillance and testing.***
- ***RESPONSE – Immediate response if compromised product reaches the market.***



## Prevention Principles / Approaches

- *The most effective and efficient method to assure the absence of adulterants and contaminants is through control of the supply chain back to source.*
- *We deploy a positive control based, Quality Assurance approach to prevent adulteration of our agricultural raw material base.*
- *Our strategic, preventive control of the supply chain is based on a three-pronged approach:*
  - A. Strategic partner alliances in source countries*
  - B. Control of source material*
  - C. Control of manufacturing process*





## Prevention Principles / Approaches

### A. Strategic Partner Alliances

- *The majority of spices are procured through the Global Sourcing Program whereby we buy direct from source through strategic partner processors.*
- *These relationships enables us to have direct, in-depth expert involvement at source countries with growers and processors.*
- *Our Quality Assurance experts are actively engaged with these strategic processors to direct and oversee QA / QC programs and testing and to provide frequent independent audits.*
- *They focus on adhering to Good Agricultural Practices (GAP's), Good Manufacturing Practices (GMP's) and on the same rigorous Quality Assurance programs as with our own operations.*



## Prevention Principles / Approaches

### B. Control of Source Material

- ***Our strategic partner suppliers procure spices and herbs only in the whole, unground form.***
- ***Since the source material has not been ground or processed, it can readily be identified as pure plant material.***
- ***No preground material is purchased. Preground material historically has been an easy target for hidden economic adulteration.***



## Prevention Principles / Approaches

### C. Control of Manufacturing Process

*Our strategic partners are required to:*

- *Have state-of-the-art processing facilities.*
- *Apply robust incoming inspection, testing and process controls.*
- *Meet the same quality standards and expectations required by McCormick facilities worldwide.*
- *Possess a rigorous Quality Assurance Program.*
- *Undergo an audit at least annually.*



# Intervention





## Examples of Proactive Intervention Programs

- *Material Risk Assessment*
- *Supplier Quality Expectation Manual*
- *Program Example – Chinese Garlic*
- *Global Economic Adulteration Monitoring Program*
- *Prevention Based Microbiological Program*



## Material Risk Assessment

- ***The large number of raw materials we use mandates a well-thought through and comprehensive risk analysis and management approach in order to deploy our quality and food safety resources, time and energy rationally.***
- ***Using the risk analysis matrix, in the following slide, every material we purchase is evaluated on the basis of five (5) potential sources of contamination:***
  - ***Microbiological***
  - ***Intentional Economic Adulteration***
  - ***Natural Contamination from the Field or Farm***
  - ***Process Contamination***
  - ***Chemical Contamination***



# Material Risk Assessment

Material Description	Risk	Risk Score	Risk Evaluation Criteria									
			Adulteration									
			Microbial Contamination (e.g. pathogens, yeast & mold)		Economic (e.g. Sudan Red, Corn Starch, Melamine)		Natural (e.g. Extraneous material, wheat seed - Allergen, GMO)		Process (e.g. Foreign matter, sulfites from coal fire drying)		Chemical Contamination (e.g. Pesticides, dioxin, BPA)	
			S 1-4	F 1-5	S 1-4	F 1-5	S 1-4	F 1-5	S 1-4	F 1-5	S 1-4	F 1-5
	HIGH	15	3	2	1	1	1	1	2	3	1	1
	HIGH	16	3	2	1	2	1	1	2	3	1	1
	HIGH	15	3	2	1	1	1	1	2	3	1	1
	HIGH	15	3	2	1	1	1	1	2	3	1	1
	HIGH	15	3	2	1	1	1	1	2	3	1	1
	LOW	5	1	1	1	1	1	1	1	1	1	1
	LOW	5	1	1	1	1	1	1	1	1	1	1
	HIGH	15	4	2	2	2	1	1	1	1	1	1
	HIGH	15	4	2	2	2	1	1	1	1	1	1
	HIGH	15	4	2	2	2	1	1	1	1	1	1
	HIGH	15	4	2	2	2	1	1	1	1	1	1
	HIGH	15	4	2	2	2	1	1	1	1	1	1
	HIGH	15	4	2	2	2	1	1	1	1	1	1
	HIGH	15	4	2	2	2	1	1	1	1	1	1
	MEDIUM	7	1	1	2	1	1	1	2	1	1	1



## Supplier Quality Expectation Manual

- *The strategic partners operate their manufacturing facilities under the same standards as plants operated in developed countries.*
- *These requirements are defined and communicated through the Supplier Quality Expectation Manual which specifies world state-of-the-art standards for twelve (12) broad performance areas.*





MCCORMICK & COMPANY, INCORPORATED

# SUPPLIER QUALITY EXPECTATIONS





# CONTENTS

- FACILITY AND EQUIPMENT. . . . . 2
- QUALITY SYSTEMS/PROGRAMS. . . . . 3
- AUDITING. . . . . 4
- SANITATION AND PEST CONTROL. . . . . 5
- HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) . . . . . 6
- FOREIGN MATERIAL/EXTRANEOUS MATTER CONTROL . . . . . 7
- PURCHASED RAW AND PACKAGING MATERIAL CONTROL . . . . . 8
- HANDLING/STORAGE/TRANSPORTATION. . . . . 9
- ALLERGEN CONTROL. . . . . 10
- TRACEABILITY/RECALL. . . . . 11
- LABORATORY INTEGRITY. . . . . 12
- REGULATORY/RELIGIOUS COMPLIANCE. . . . . 13



**1**  
**SUPPLIER**  
**QUALITY**  
**EXPECTATIONS**



## **Global Economic Adulteration Monitoring Program**

- ***Corporate QA administers an Economic Adulteration Early Warning Program on a global basis.***
- ***Raw materials that are in any way susceptible to economic adulteration are included in this monitoring program.***
- ***These items, from the various source countries are systematically, randomly sampled and examined for economic adulteration using proprietary in-house testing methodology.***
- ***We screen for known adulterants, and for early identification of new / emerging adulterants.***



## Microbiological Program

***Those Core spice, herb and related materials which are susceptible to harmful microbiological contamination are required:***

- To be pasteurized using approved, effective methodology, or,***
- Tested at source or receipt, applying US FDA sampling protocol, to insure they are safe for human consumption.***



# ***Awareness and Early Warning Global Initiative***





# ***Legislative and Regulatory Engagement***





# ***Efforts to “Raise the Bar” for the Global Spice Industry***





**THE END**

